

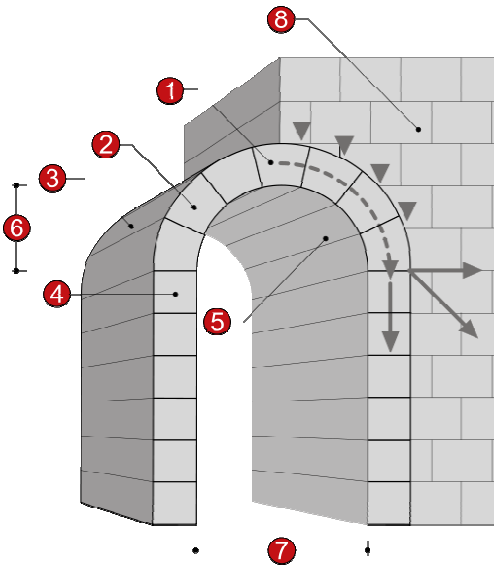
LESSON 10. GEOMETRY

ACTIVITY 1. THE ARCH

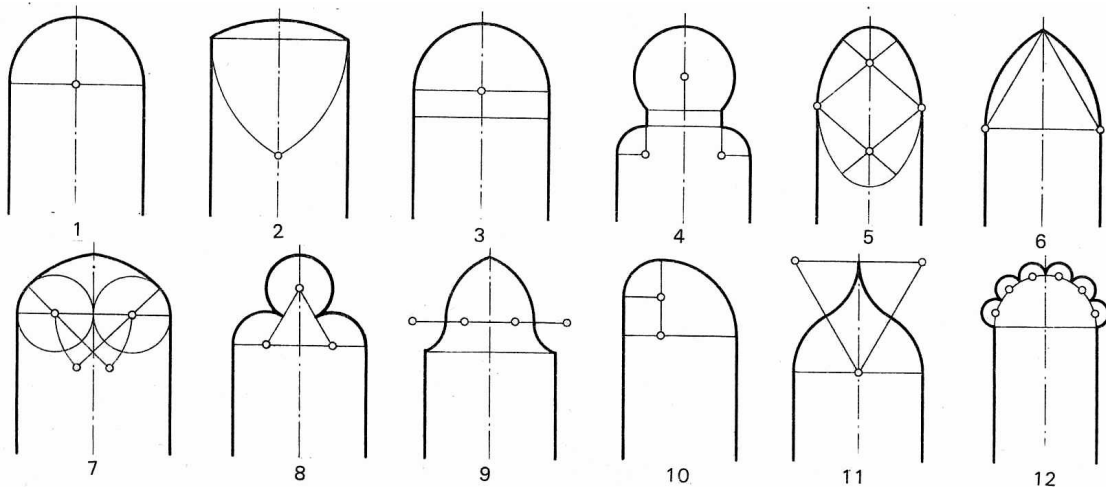
An arch is a structure that spans a space and supports a load. Arches appeared as early as the 2nd millennium BC in Mesopotamian brick architecture and their systematic use started with the Ancient Romans who were the first to apply the technique to a wide range of structures.

These are the parts of an arch:

1. Keystone (clave)
2. Voussoir (dovela)
3. Back (extradós)
4. Impost (imposta)
5. Intrados (intradós)
6. Rise (flecha)
7. Clear span, "Bay" (luz, vano)
8. Abutment (contrafuerte)



There are many different types of arch. Here you are some of them and the way to built them.



arcos: 1, de medio punto; 2, rebajado o escarzano; 3, peraltado; 4, de herradura; 5, elíptico; 6, apuntado u ojival; 7, carpanel apuntado; 8, trebolado; 9, escocés; 10, por tranquil o rampante; 11, conopial. 12, festoneado.

You have to find the way to make three of them and to explain step by step the followed process.

And finally you have to draw on your notebook with rule and compass the chosen arches.

The starting point have to be the wide and the height of the basic rectangle.